

Scenic Byways

A Review of Processes, Administration, and Economic Impacts

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Since the passage of the Scenic Byways Act in 1989 and the publication of the Scenic Byways Advisory Committee Report of 1991, many states have created byways programs, joining the states that have had administered programs for years. The initial flurry of activity has retreated somewhat, and some of the original interest has waned. Yet this period offers an advantage to states such as Oklahoma that did not begin a byways program immediately after 1989–1991. What aspects of their programs have been successful? What has worked well and what has not? These questions prompted a detailed analysis of how states were addressing specific issues such as (a) the creation, administration, and funding of a scenic byways agency, (b) designation criteria, and (c) the economic effects of scenic byways. The objective was to determine which ideas and modifications implemented by other states could translate to Oklahoma's setting.

The Scenic Byways Act, the first national legislation in more than 15 years dealing with scenic byways, was introduced in the U.S. Congress on February 22, 1989. This act directed the Secretary of Transportation to develop proposed national scenic byways program guidelines and designation criteria, and to study the economic impact of scenic byways. The result of the Scenic Byways Act was the creation of the National Scenic Byways Program.

The National Scenic Byways Program is a partnership of federal, state, and local officials and private citizens. Federal grants are available for states to use for existing byways or to develop state programs. States (such as Oklahoma) that do not yet have a byways program cannot take advantage of the financial assistance provided by the National Scenic Byways Program. Any individual, organization, tribe, or agency can nominate a road as a National Scenic Byway, but the nomination must be submitted through an existing state scenic byways agency (1).

One group that has had a major impact on efforts to form a scenic byways program is the National Scenic Byways Advisory Committee. The executive summary of the committee's report states that the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directed the Secretary of Transportation to establish a National Scenic Byways Advisory Committee to assist him in developing a national scenic byways program. The committee's unique challenge and opportunity was to recommend to the Secretary of Transportation those minimum criteria by which state and federal agencies would designate and operate certain outstanding scenic byways as National Scenic Byways and All-Americans Roads, while maintaining and improving the intrinsic qualities (scenic, historic, nat-

ural, cultural, recreational, or archaeological) of those byways and the corridors they traverse (2).

This proposed program was to be a voluntary program. No state or municipality would be required to participate; participation would be strictly at their own initiative. Accordingly, there would be no penalties, such as forgoing any federal-aid highway funding apportionment, for nonparticipation. Citizens and local and state governments should welcome the program because of the economic benefits through increased tourism and resource-protection benefits it will bring them. The advisory committee strongly encouraged states that had not initiated a scenic byways program to consider doing so to take advantage of the National Scenic Byway and All-American Road programs. The committee stated that the national recognition offered through these programs would outweigh any negatives associated with the various reasons given for not starting a state byways program (2).

Since the passage of the Scenic Byways Act in 1989 and the publication of the Scenic Byways Advisory Committee Report of 1991 (2), many states have created byways programs, joining the states that have had administered programs for years. The initial flurry of activity has retreated somewhat, and some of the original interest has waned. Yet this period offers an advantage to states such as Oklahoma that did not begin a byways program immediately after 1989–1991. What aspects of their programs have been successful? What has worked well and what has not? These questions prompted a detailed analysis of how states were addressing specific issues such as (a) the creation, administration, and funding of a scenic byways agency, (b) designation criteria, and (c) the economic impact of scenic byways (Table 1). The objective was to determine which ideas and modifications implemented by other states could translate to Oklahoma's setting.

SCENIC BYWAYS ADMINISTRATION

To ensure that designated scenic byways resources are managed, preserved, and protected to the fullest extent possible for the enjoyment of the motoring public, an administrative and reviewing body of the program must be created. This agency must interpret and act on scenic byway nominations using established program guidelines, oversee the management of the state scenic byways, and determine appropriate funding sources. To evaluate the advantages and disadvantages of existing scenic byways organizational structures and procedures, the following states' programs were studied: Arizona, Colorado, Oregon, New York, Kansas, Wyoming, Indiana, Nevada, and New Mexico.

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TABLE 1 States Reviewed for Scenic Byways Administration, Designation Criteria, and Economic Impact

	Administration	Designation Criteria	Economic Impact
Arizona	x		x
Arkansas		x	
Alabama			x
Colorado	x		x
Florida			x
Indiana	x		
Iowa			x
Kansas	x	x	x
Kentucky		x	
Louisiana			x
Montana			x
Nevada	x	x	
New Mexico	x	x	x
New York	x		x
North Carolina			x
Ohio		x	
Oregon	x	x	x
Texas			x
Virginia			x
Wyoming	x		x

Arizona

The Arizona Scenic Byways Advisory Committee consists of 11 members and serves as the review element for the state under the Director of the Arizona Department of Transportation. The advisory committee's responsibilities include reviewing requests to establish or designate a scenic byway; preparing recommendations to the Transportation Board for designation as scenic byways; and reviewing established or designated scenic byways for recommendation to the Transportation Board, as to their continuation or deletion as a scenic byway. The advisory committee is charged with the responsibility of making a systematic evaluation of the extent and quality of the resources for the proposed scenic byway according to the designation criteria established for evaluation (3).

Colorado

The Colorado Scenic Byways Commission is composed of 15 members serving 3-year terms. The commission consists of appointed members from the original Scenic Byways Task Force (first formed to study the feasibility and benefits of a state byways program) and includes representatives from the state legislature, the Colorado Historical Society, and the Colorado Tourism Board. The original commission served beyond the initial 3-year term because the members felt their work was not completed. An additional element worth noting in the Colorado program is a three-quarter time staff member from the Colorado Department of Transportation who manages the program with funding assistance from the Tourism Board and Historical Society (4).

The Colorado Scenic Byways Commission has remained virtually unchanged with 15 members still serving on it. The state's byways program predates the federal program created through ISTEA legislation. Colorado had 13 designated scenic byways before 1991 and has added another 8 roadways to that list for a total of 21. At the present time, Colorado is not reviewing any more routes for designation. They are presently engaged in securing funding for the existing byways, primarily through ISTEA funds,

because Colorado is not a donor state. Although they have identified some grant funds that could be utilized for the byways program, they are reluctant to apply for these funds until other sources are exhausted. Colorado is also using revenues from the gaming industry to fund design and historic preservation activities (S. Pearce, Colorado Department of Transportation, personal communication, April, 1996).

The state's Historical Fund (from proceeds generated by limited gambling) has made provisions for scenic byway organizations to apply for funds to prepare educational and interpretive materials and to preserve historic structures along the byways. In addition, the Great Outdoors Colorado Trust Fund (created from Colorado Lottery revenue) offers grants for projects involving state parks, wildlife, outdoor recreation, environmental education, open space, and natural areas (S. Pearce, Colorado Department of Transportation, personal communication, April, 1996). Over \$4.6 million from these various programs and grants from FY 1992 and FY 1993 has gone to fund a variety of scenic byways activities, including the development of brochures, construction of pullouts and visitor centers, interpretive signage, and the purchase of scenic and historical easements along the byways (S. Pearce, Colorado Department of Transportation, personal communication, April 1996).

Oregon

The Oregon Scenic Byways Commission consists of nine members. Unlike many of the other states reviewed, Oregon's Scenic Byways Commission does not contain any private citizens appointed as members. This element of the program can be viewed as both an advantage and a disadvantage. The advantage is that no one entity, political or otherwise, has the ability to appoint certain members to the commission and unduly influence the membership or prejudice the selection of byways in favor of any one area of the state. The disadvantage is that citizen involvement in the program can be highly beneficial to the overall direction of the program and help achieve an extended sense of community acceptance (5).

As with the Arizona program, prospective Oregon byways may be nominated by any group of individuals, but must have the concurrence and support of the agencies having legal jurisdiction of the roads along the byway. The byways commission reviews the proposal against the criteria established for the program and determines whether it should proceed through the designation process. The commission also reviews proposed byways to assure that the pattern of byways is not confusing or overly saturated. If the proposed route does not meet the initial rounds of criteria (driveability requirements), it may be considered for the tour route category. A tour route classification could be especially beneficial to an overall byways program because it would allow for a secondary designation of roadway to be included in the state program, thereby allowing more regions of the state that would not necessarily qualify under the scenic byway classification to be represented in the byways program (5).

New York

The New York State Department of Transportation is the designated state agency responsible for the administration of the scenic byways program and acts as the chair of the New York Scenic Byways Advisory Board. The advisory board is made up of 11 individuals and 2 advisors. The board works under a simple mission statement that obligates them to assist the Commissioner of Transportation with the development of a coordinated statewide scenic byways program to enhance recreational opportunities while preserving and protecting scenic, regional, historic, archaeological, and other cultural resources. The New York program realizes that the objectives of the scenic byways program (natural resource conservation and tourism and economic development) are interrelated and varied, and must be managed to prevent one interest from overwhelming the others (6).

The advisory board membership has remained unchanged and the board appears to be very functional. The New York legislature has remained at a distance from the operational development of the program, employing a hands-off approach. The New York program is 100 percent funded through federal ISTEA grants. The state has used a portion of the funds to purchase billboards. The sale is strictly voluntary but they report having some successes using this approach to eradicate billboards along the byway route. New York also conducts regional training workshops for prospective byway communities to facilitate the application process and promote the program (M. McCarthy, New York Department of Transportation, personal communication, April, 1996).

Kansas

The Kansas Scenic Byways Program is operated under the Kansas Department of Transportation, but unlike other state programs, the Kansas byway project incorporates the Chief Landscape Architect from the Department of Transportation as the program coordinator. Other state agencies involved in tourism and recreational and historical interests have an advisory role in the program. Local government participates by involvement in local management issues such as enhancement, protection, and promotion of the byway routes (7).

A primary concern of the Kansas program is to promote public involvement and assure the formation of a partnership between state agencies and local governments, with the objective of protecting and managing roadways for the enjoyment of the motoring public and increased economic gain from tourism. Although the nomination

process is open to individuals, groups, and local governments, it is the responsibility of the local government to participate in the process early to assure that the partnership takes place (R. Ross, Kansas Department of Transportation, personal communication, April 1996).

A major problem encountered by the Kansas program has been the acquisition of adjacent lands and billboard eradication. Billboards are reportedly a continuing problem. Funding for the byways program has come from state and local matching of federal ISTEA funds. So far, no state-appropriated funding has been sought to support the scenic byways program (R. Ross, Kansas Department of Transportation, personal communication, April 1996).

Wyoming

The Wyoming Department of Transportation has been designated by the governor as the official host agency for the state's scenic byways program (8). The Wyoming Scenic Byways Advisory Committee membership structure is still intact and unchanged and does not include citizen participation or legislative input. Although the legislature has not tried to take an active role in the program, the possibility of appropriated state funds for the program still exists. A unique feature of the Wyoming program is that all corridor management plans for byways are subcontracted to a consulting firm. Additionally, the state Department of Transportation conducts scenic byway development training for communities across the state (T. Cook, Wyoming Department of Transportation personal communication, April 1996).

Indiana

The Indiana Scenic and Heritage Byways Advisory Committee is composed of six members, one each from the Department of Transportation, Department of Commerce, Department of Natural Resources, Division of Historic Preservation, Association of Cities and Towns, and Association of Counties. The committee reviews application nominations and makes recommendations for designation to the lieutenant governor and the commissioner of the Indiana Department of Transportation (9).

The Indiana program utilizes districts or Metropolitan Planning Organizations (MPOs) to evaluate and select nominations that conform to program criteria before forwarding them to the advisory committee for consideration. This method of local review as a first cut for the advisory committee is an excellent screening method that may provide a buffer between the desires of the local community or individuals and the realities of the overall scenic byways program, as administered by the committee. Projects that do not meet program criteria will be screened, thereby allowing the advisory committee to actively evaluate only those potential projects that conform to the adopted requirements and overall program vision (9).

Nevada

The duties of the Nevada Scenic Byways Committee are similar to the other states reviewed for content and procedures. The committee guides the sponsoring groups through the nomination process and evaluates the scenic qualities of nominated roadways. Based on the information submitted in the application, the committee makes a recommendation for designation (10).

The evaluation process used by the Scenic Byways Committee has six goals: identify the states most beautiful scenic roadways; determine the importance of cultural and natural qualities; identify roadway and visitor service issues; determine the type and relative significance of the economic-development impacts that will result from designation; achieve geographical and physiographical diversity of the byways that reflects the state's varying climates, ecosystems, and cultures; and evaluate and designate byways in a manner that is fair, efficient, and affordable to all parties concerned. The most noteworthy aspect of this program is the application procedure. Nevada uses a slightly different approach to nominate a roadway for scenic byway designation. The process involves a preapplication to the state tourism director who, after review of the nomination, sends a full application package to the sponsoring agency for completion. This process allows for initial review of the application before the project receives consideration from the committee. Although the review is not from a local group or agency, a screening mechanism is in place to evaluate program appropriateness prior to committee review (10).

New Mexico

The responsibilities of the New Mexico Scenic and Historic Byways Advisory Council include evaluating proposals submitted by the route sponsors against program criteria, approving recommendations submitted to the Highway Commission, preparing presentations (with the route sponsor) to the Highway Commission, monitoring development of project operation and maintenance, reviewing existing routes for compliance, and making recommendations for de-designation when appropriate (11).

Responsibility for local review of nominations has been placed with the Regional and Metropolitan Planning Organizations. Each of the seven Regional Planning Organizations (RPOs) and three MPOs receive nominations from various local groups (route sponsors), evaluate the nominations, and submit their recommendations to the New Mexico Scenic and Historic Byways program coordinator. The coordination of RPOs and MPOs from adjacent geographical areas, in joint sponsorship of routes of mutual interest, is encouraged (11).

The advantages of the New Mexico program are the inherent screening mechanisms that promote local coordination and review. Route sponsors must prescreen their applications by coordinating with the RPOs and MPOs to gain their endorsement before the nomination is forwarded to the scenic byway coordinator for interpretation, review, and eventual advisory council consideration (11).

New Mexico's Scenic Byways Advisory Council remains an administrative program with the original 17 members and organizations represented. The state has applied for and received \$1.4 million in ISTEA funds to support the byways program. No other sources of funding have been required. A unique feature being employed by the program coordinator is direct outreach to potential byway communities. The program actively searches for byway projects rather than taking a passive role and waiting for communities to make an application on their own. The program requirements and criteria have been written as rules within the New Mexico State Highway and Transportation Department and adopted as law. This approach has deflected any possible legislative manipulation within the program (J. Gonzales, New Mexico Department of Tourism, personal communication, April 1996).

Overview of Administration Policies and Procedures

There appeared to be a consensus among the states in this study concerning key policies and procedures that govern the administration of a scenic byways program.

- The responsibilities of an administrative organization should be to develop a statewide vision for the program that is fair and equitable to all geographical areas and to evaluate nominations submitted by sponsoring units of local government, based on program criteria, intrinsic qualities, significance to a specific states program, and corridor management plans.
- An administrative agency should arrange and conduct sight visits when necessary to adequately review the nominated roadway and prepare recommendations to the appropriate individual or agency for consideration and approval.
- Operating procedures should seek to coordinate the program statewide by utilizing support and review elements that will efficiently and fairly accommodate the nomination and review process.
- A local review agency should be appointed to review the formal application to coordinate efforts between state and local governments. The local review process should consist of a checklist of application and program elements to determine appropriateness and due diligence on the part of the route sponsor, followed by a recommendation of concurrence or rejection for the project.
- Structurally, an advisory council should include no fewer than five and no more than nine member designees from state agency directors. Although broad representation should be a goal, the number of members should be kept to a workable number that will not hinder the selection and review process. In states that have an existing scenic byways program, council membership has generally been held under 10.
- The appointment of a full-time scenic byways coordinator would provide much-needed direction and leadership and lend a degree of continuity to the program. The coordinator should possess skills in one or more of the following fields: program management, landscape architecture, geography, economic development, planning, land management, historic preservation, and tourism.
- Other members of the advisory council should come from interagency appointments from state or federal agencies. Private-sector membership could easily be facilitated through appointment by the governor, lieutenant governor, secretary of transportation, or other designated individuals or agencies. These appointments should come from recommendations of individuals that have demonstrated experience in a field or educational background that lends itself to scenic byways evaluation and oversight.
- Funding for a scenic byways program can be obtained from several different sources. Federal funds have traditionally been available from ISTEA, but donor states (such as Oklahoma) are not eligible for such funds (12). This status is determined by the amounts of federal fuel taxes collected as compared with a percentage of the state's normal apportionment combined with discretionary programs, such as scenic byways funding (C. J. Younger, Oklahoma Department of Transportation, personal communication, Feb. 23, 1996). Appropriations from the state's legislature would require passage of legislation to enact the program and regulations governing its structure and operations. A second funding possibility would involve direct and indirect donations from the general public.

DESIGNATION CRITERIA

The designation criteria for scenic byways play a crucial factor in a program's success. If designation criteria are too broad, roads of varying quality could receive byway designation. Byway designation would then lose its credibility, and would mar a traveler's ability to identify the state's most exceptional highways. However, if designation criteria are too narrow, then only a few roads would benefit from the distinction. This could prohibit the development of a network of scenic byways, and could lead to lower tourist interest based on a byway's isolation.

To determine how states were addressing the development of designation criteria, this study evaluated various states with scenic byways program (Table 2). These states were Kansas, Colorado, Wyoming, Arizona, Arkansas, New Mexico, Nevada, Kentucky, Oregon, and Ohio. Several factors were used to select these states for review: proximity to Oklahoma, similarity to Oklahoma in landscape types, and presence of a successful byway program.

Kansas

Kansas identified four criteria for establishing a state scenic byway. Scenic quality is defined by whether the road is pleasant or unpleasant visually. Scenic diversity is determined by a diversity in type (depth or length) and composition, both of which offer variety and a change of pace. The remaining criteria are outstanding quality and route impressions, defined as a memorable experience that users would recommend to others. The philosophical base for the byways program states that a scenic road should be experienced through the traveler's eye and mind. The road itself must be set in a corridor that contains outstanding visual factors that the traveler will find enjoyable and entertaining (7).

Wyoming

The program handbook for Wyoming includes a Scenic Quality Appendix, which assists the byway sponsor in understanding the importance and the process of determining scenic quality. The appendix discusses the physiographical regions of Wyoming and the principles of scenic quality, including the five landscape elements of landform, vegetation, water, wildlife, and manmade

modifications. A Scenic Quality Evaluation is also included, which identifies the four steps to determine scenic quality: (a) determine the viewshed, (b) characterize the landscape and determine inherent scenic qualities, (c) identify and evaluate visual modifications, and (d) identify other factors such as uniqueness, interpretation opportunities, viewing position, macro- and microlandscapes, season, and variety (8).

Arizona

Arizona uses three characteristics to evaluate a proposed scenic byway: vividness (the memorability of the visual impression from the contrasting landscape elements); intactness (the integrity of the visual order and the extent to which the landscape is free from visual encroachment); and unity (the degree to which visual aspects join together to form a harmonious composite of visual patterns) (3).

Oregon

Criteria for the Oregon Scenic Byways Program are evaluated as best, moderate, or minimal for the following categories: landform (the topographical relief is visible, dominant, and exceptional); vegetation (a high degree of vegetative patterns provide unusual or outstanding diversity); water (water bodies or streams are a dominant feature in the landscape); color (there are rich color combinations, variety or vivid color, or pleasing contrasts in the soil, rock, vegetation, water, or snow fields); modifications (there are no modifications that add or subtract to the visual harmony); and uniqueness/scarcity (there are elements that are one-of-a-kind or very rare within the region) (5).

Ohio

The Ohio Scenic Byways Program states that proposed roads shall be representative of a heightened visual experience, be distinctive with respect to the composition of features associated with a byway corridor, or showcase exceptional or unique traits of that particular region. Scenic elements could include landscape, distinct landforms, water, vegetation, or manmade development that contributes to a corridor's visual environment (13).

TABLE 2 Byway Types Defined by State

Classification	KS	CO	WY	AZ	AR	NM	NV	KY	OR	OH
Scenic/Visual	•	•	•	•	•	•	•	•	•	•
Natural		•		•		•	•		x	•
Historical		•		x	•	•			x	•
Cultural			•	•	•	•	•			•
Archeological										•
Recreational			•		•	•				•
Educational			•							
Scientific		•								
Geological			•							
Wildlife		•								
Ethnic		•				•				

• denotes an item specifically listed as scenic byways designation criteria.

x denotes an item listed for other route designation (Arizona's Historic Road or Oregon's Tour Route).

Overview of 10 States

Although a few of the states discussed a basis for determining scenic quality, all of the states delineated the standards of scenic byway designation. Some states chose a simplistic approach for defining designation criteria (14) whereas other state's approaches were more complex. Some states included a list of only four or five criteria, and one state noted 18 designation criteria for scenic byways (15). When all the information was compared, it was determined that most of the states included criteria that addressed the following:

- Basic criteria regarding characteristics of the byway,
- Paving surface,
- Safety,
- Access,
- Length,
- Support from local groups and municipalities, and
- Plans for protection, enhancement, and promotion.

When classifying a byway, some states followed the six categories promoted in the federal byways program: scenic, natural, historical, cultural, archaeological, and recreational (16). Ohio and New Mexico adopted the federal guidelines without modifying the designation criteria to satisfy their unique concerns. Most states, however, adjusted this list by either condensing or expanding on the six basic classifications. The chart in Table 2 presents an overview of the basic criteria as defined by each state in this study.

Most states mention that scenic byway nominations must be paved, accessible to the public, and meet minimum safety standards. (Some states fail to address these issues at all.) These criteria relate to the proposed road's construction and are not easily changed or disputed, narrowing the possibilities of inferior byway nominations. The length of a scenic byway is disputed among the states that mention this category. Some states list 1 mi as a minimum requirement; other states require 20 or 30 mi (7).

The final criteria categories relate to the community support and plans to protect the byway. Experience has shown that successful byway designation comes from communities with high levels of support of their nomination (17). The communities, local governments, and citizen groups are the direct beneficiaries of byway designation, therefore it is common sense to require their efforts to ensure the byway will maintain its intrinsic qualities. The corridor management plan is required as the detailed document for the byway's protection, management, and promotion (18), although many states do not require the completed plan until after a byway has received designation.

ECONOMIC IMPACT

A poll conducted by the President's Council for the American Outdoors found that more than three-fourths of Americans prefer pleasure driving as their chosen recreational activity (19). This gives communities the chance to capitalize on the recreational pursuits of travelers. It is possible for the long-term vitality of a region to be enhanced through a scenic byway designation. According to the U.S. Travel Data Center, the revenues generated from the travel and tourism industries were among the greatest in the nation in 1994 (20).

Travel and tourism was a \$416 billion industry in 1994. It generated \$5.8 billion in tax revenues in that same year. Travel and tourism was the nation's third largest retail industry. Employment

figures indicate that it was the second largest employment sector in America, employing 6.3 million people and indirectly employing 2 million more who service the travel and tourism sector. The total industry payroll was \$110 billion. In 34 of 50 states, travel and tourism ranked as either the first- or second- largest employer (20).

Fifteen states were reviewed to determine the economic impact of scenic byways. The majority of states surveyed have not attempted any type of formal analysis. Most were extremely interested in doing this type of research, but for various reasons have not had either the time or resources. Some states did include some economic information in their initial scenic byways study or plan. However, most of this information was limited to the *perceived* value of travel and tourism unique to their state. These statements were only a picture of current travel and spending trends in the state. All states reviewed for this study expressed goals involving expanded economic growth to accompany byway designation. The following discussion outlines the extent of economic impact identified in each state.

Kansas

The Kansas Scenic Byways Program has not initiated any type of study that would measure any economic growth associated with it. Kansas had originally planned to do an analysis based on a model derived from the "Kansas Input-Output Model: A Study in Economic Linkages" (21). This model would measure the income, sales, and employment impacts of scenic byways programs through the computation of multipliers that measure the impact of tourists' expenditures. (B.L. Smith, Kansas State University, personal communication, April 1996).

Arizona

Arizona has no formal studies of economic effects of its scenic byways but is interested in completing such studies in the future (E.L. Brady, Arizona Department of Transportation, personal communication, April 1996). Arizona has, however, informally surveyed the chambers of commerce of communities along the designated Scenic Route 66. Those chambers claim that revenues at tourist and travel-related businesses have risen by a third after designation. New visitor centers were attracting 50 percent more visitors on the route.

Florida

Florida has not conducted any economic analysis or impact assessment of scenic routes. General travel has been assessed, but not scenic corridors as a group. An annual report from each sponsoring group responsible for the corridor management plan in their respective area is required by the Florida Scenic Byways Program (B. Cunhill, Florida Department of Transportation, personal communication, April 1996). Many of the components in this annual report touch upon economic impact. The report details the existing corridor conditions and achieved goals, many of which deal with economic growth. An attempt to measure this growth is required, as well as a report of the measurement tools, techniques, and sources used in gathering this information. Another feature unique to Florida is that their scenic routes and management plans must be tied to the local comprehensive plan required by state law.

Iowa

Iowa has completed work in the area of economic impact of scenic byways. A 1994 study for Iowa's four pilot byways was undertaken to accomplish many tasks (20). One component was the economic impact of scenic byways. Estimations of typical expenditure patterns along byways and projected total expenditures attributable to the byway were made by calculating ratios based on survey data. Selected study results include the following:

- \$104.50 average travel-party expenditure per stay,
- One-third of those dollars spent on shopping,
- \$24.80 average spent on lodging,
- \$24.20 average spent on eating and drinking,
- 66 percent of travelers indicated an intrigue with small towns, and
- When asked about involvement activities, the most frequently given response (77 percent) was enjoying scenic views.

North Carolina and Virginia: Blue Ridge Parkway

A case study of the economic impact of the Blue Ridge Parkway was completed in 1990 by the Southeastern Research Institute, Inc. The analyses employed in the study estimated the direct effects of travelers' or visitors' expenditures on primary income, tax revenues, and jobs in the counties bordering the corridor (22). The primary findings include the following.

- Visitors in 1987 spent about \$1.3 billion in the counties contiguous to the parkway.
- These expenditures generated approximately \$98 million in tax revenues.
- Tourist expenditures along the parkway supported more than 26,500 jobs.
- Property values of farmland were higher along the parkway than those found in the rest of the county.

Colorado

Colorado has taken an active role in determining economic impact with regard to scenic byways in the state. The Colorado Department of Transportation commissioned a study aimed at the economic impact of scenic byways in Colorado. The first part of the study was to undertake a survey at visitor centers along selected byways. The survey attempted to determine if travelers were indeed there for the scenic byway and attempted to determine the spending habits of scenic byway travelers. Information gathered from this part of the study can be combined with spending habit information to compare travel-party size, dollars spent per mile, and dollars spent per average trip with statewide and national figures.

The second portion of the study was a marketing campaign that included large advertisements that ran in major newspapers and fliers that were distributed at selected gas stations. Signage along byways was either added or increased. Three byways were then selected for study. Approximately 4 to 6 months after the campaign, tourism-related industries and businesses along these byways were surveyed. Results to date show that revenue has risen among these tourism industries.

The third part of the study utilized counts to measure traffic growth attributable to scenic byways designation. The researcher

examined data from 19 byways. Current and historical Department of Transportation traffic counts were obtained to determine traffic growth on the selected routes. The report used 1990 census data for the county population base data. Other instruments were used to survey current regional growth. They wanted to account for traffic growth attributable to regional population growth. The researchers are hoping that several of these byways will have growth that is not attributable to anything except byway designation.

Oregon

The Oregon Department of Transportation submitted a study in 1990 for FHWA. The primary objective of the study was to gain a better understanding of user preferences of travelers and how those preferences influenced further development of the scenic highways concept, and an understanding of the economic benefits that such scenic designation can contribute (23). The research indicated that people pursue and enjoy low-stress scenic roadways and prefer an attractive natural landscape if given the choice. Sightseeing and relaxing were the most preferred activities for travelers. Unfortunately, no information existed before the study with which to compare the new information gained through economic analysis.

This study allowed for the projection of total impacts in 2000. Various scenarios were developed outlining different levels of growth in their projections. The total economic benefits of scenic highway development on US-101 were substantial. The study's research indicated that scenic highway benefits range from an increase in visitor expenditures between \$33 million and \$81 million per year, depending on assumptions regarding coastal growth rates (23).

Summary of Economic Impacts

Among the states reviewed, there were common elements that can be applied for an anticipated economic impact of scenic byways. The most common finding was that most states had not conducted any type of economic analysis for scenic byways. There was often a perception of positive economic impact, but no data to support the suspicions. From the states who had conducted research, the following summarizes their findings:

- Marketing plays a very important role in creating positive benefit.
- Signage plays a very significant role.
- Tourism-related industry is ready to receive or support traffic growth for positive economic benefit to occur.
- Scenic byways programs have been met with overwhelming approval.
- Positive economic benefit is either perceived or has been measured.
- Byways must be of a high quality to gain a favorable response from travelers.

CONCLUSION

Thirty-three states have implemented scenic byways programs since the Scenic Byways Act was introduced in Congress in 1989, resulting in the creation of the National Scenic Byways Program. There are similarities between the programs of each state due to

recommendations by the National Scenic Byways Program and the National Scenic Byways Advisory Committee Report of 1991, but each state has adopted these guidelines to fit its needs.

This study attempted to analyze how these states were addressing three specific issues: (a) the creation, administration, and funding of a scenic byways agency; (b) designation criteria; and (c) the economic impact of scenic byways. The objective was to determine which ideas and modifications implemented by other states could translate to Oklahoma's setting. It became clear that most states had adequately addressed the first two issues, offering consistent practices as well as innovative approaches. However, there has not been a sufficient amount of self-evaluation to determine if the decisions of each state concerning administration and management of their respective scenic byways program were, in fact, most appropriate for their needs.

The third issue, economic impacts, revealed inconclusive results. A common belief of all states was that a scenic byways program would provide economic benefits through increased tourism as well as protect the critical scenic, cultural, and historical resources of the state. Perhaps these beliefs are justifiable, but most states have not followed through with the necessary statistical data to prove their assumptions. Further research is needed to determine the verifiable economic impacts of scenic byways.

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